

### **AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows:

#### **LISTING OF CLAIMS:**

Claim 1. (Original) A process for producing vitamin C from L-sorbose which comprises contacting L-sorbose with a purified L-sorbose dehydrogenase having the following physico-chemical properties;

- a) Molecular weight:  $150,000 \pm 6,000$  Da or  $230,000 \pm 9,000$  Da (consisting of 2 or 3 homologous subunits, each subunit having a molecular weight of  $75,000 \pm 3,000$  Da)
- b) Substrate specificity: active on aldehyde compounds
- c) Cofactors: pyrroloquinoline quinone and heme c
- d) Optimum pH; 6.4 to 8.2 for the production of vitamin C from L-sorbose
- e) Inhibitors:  $\text{Co}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Fe}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Zn}^{2+}$ , monoiodoacetate and ethylenediamine tetraacetic acid,

wherein the conversion of L-sorbose to vitamin C is catalyzed by the purified L-sorbose dehydrogenase in the presence of an electron acceptor, and isolating the resulting vitamin C from the reaction mixture.

Claim 2. (Original) The process for producing vitamin C from L-sorbose according to claim 1, wherein the L-sorbose dehydrogenase is derived from the strain *Gluconobacter oxydans* DSM No. 4025 (FERM BP-3812), a microorganism belonging to the genus *Gluconobacter* having identifying characteristics to *G. oxydans* DSM 4025 (FERM BP-3812) or its mutants.

Claim 3. (Previously presented) The process according to claim 1, wherein the reaction is carried out at pH values of about 6.4 to about 9.0 and at a temperature range from about 20°C to 60°C for about 0.5 to 48 hours.

Claim 4. (Previously presented) The process according to claim 1, wherein the reaction is carried out at pH values of about 7.0 to 8.2 and at a temperature range from about 20°C to 50°C for about 0.5 to 24 hours.